



## Featured Mission



### HELP WANTED IN SPACE

Do you have what it takes to be an astronaut? The first American astronauts were all pilots with military experience. Today, astronauts come from many different backgrounds. Scientists, engineers, teachers and pilots can all become astronauts. NASA has trained nearly 300 astronauts since the

first seven in 1959. NASA will need many more astronauts to fulfill its mission to return to the moon and go on to Mars.

Astronauts work on the International Space Station and the Space Shuttle. They run experiments and maintain the many systems on the spacecraft while in space. Astronauts spend most of their time on Earth. On the ground, they support the space program and make public appearances. They also spend a lot of time taking classes and studying.

NASA has three types of astronauts. Pilots fly the Space Shuttle and can command missions after they have flown two missions. Mission Specialists are in charge of running experiments. They also coordinate the work of their crew mates. Mission Specialists also do space walks. Payload Specialists are experts on whatever cargo is being carried. They are usually from outside NASA.

Every year several thousand people apply to become astronauts. About one out of every 200 applicants make it into the program. New astronauts spend their first year training at NASA's Johnson Space Center in Texas. Astronaut training is made up of lots of classes and practicing for space. To become an astronaut, you need to study math and science in school. You need to get good grades and do well in college, too. Most of today's astronaut knew they wanted to become astronauts before they reached high school. It is never too early to start planning on being an astronaut. So take your math and science seriously!

[www.nasa.gov/audience/forstudents/5-8/features/F\\_Astronauts\\_in\\_Training.html](http://www.nasa.gov/audience/forstudents/5-8/features/F_Astronauts_in_Training.html)

## Activity Corner

Test your skills at monitoring the health of an astronaut crew. Created by the BBC, the Space Doctor game wants to challenge you to help keep your crew alive and healthy during a journey to Mars.

[www.bbc.co.uk/science/space/playspace/games/spacedoctor/index.shtml](http://www.bbc.co.uk/science/space/playspace/games/spacedoctor/index.shtml)

## Bytes and Bits



January 28 and February 1 mark the anniversaries of the Challenger and Columbia disasters. Please take a moment to honor the memories of the brave men and women of those NASA Space Shuttle missions.

## NESN Puzzler

*What does astronaut mean?*

The first correct ten answers will receive a NASA prize! Email us your name, teacher's name, and the name and address of your school. Answer to last month's NESN Puzzler: Jupiter, Uranus and Neptune.

## NASA Explorers are people like you

**Name:** Aprille J. Ericsson

**Education:** PhD Mechanical Engineering  
[Aerospace], Howard University

**Job Title:** Instrument/Proposal Manager and Professor



Dr. Aprille Ericsson is the first African-American woman with a PhD in Engineering to work at NASA's Goddard Space Flight Center. She spent most of her time at NASA on a team developing and building spacecraft controls. Now she helps plan future spacecraft missions and leads a team building instruments. She also teaches engineering at Howard University. Aprille is a strong advocate for girls and young women to engage in science and mathematics. Aprille is a popular woman. She has been featured on NBC Nightly News and many on-line and print magazines. So what is the coolest part of Aprille's job? She loves the fact that systems and instruments she has developed and managed "are now up in space and collecting great data." She also enjoys getting to speak to students and scientists all around the country. When she is not working hard at NASA, teaching at Howard University or speaking publicly, Aprille likes to play softball, basketball and lots of other sports.

## NES Spotlight

**Martinsville Middle School**

**Students:** 608, **Teaching Staff:** 57

Martinsville Middle is the only middle school in the Martinsville, Virginia school district just north of the Virginia - North Carolina border. The school was built in 1940 as part of a public works project. It was originally a high school. In 1997, after major renovations, it was reopened as Martinsville Middle School. With a major award from the Harvest Foundation, this year the school launched a 5-year literacy campaign to help prepare their students for life. In 2002, the school was also awarded funds to establish a Science, Engineering, Mathematics, Aerospace Academy (SEMAA) and an Aerospace Education Laboratory. The lab provides interactive flight, navigation and weather computer programs for fun, hands-on learning. In 2003, Martinsville was selected as one of ten Journey Through The Universe sites. This program has NASA scientists spend one week a year to visit classrooms, provide professional development for the teachers and assist in a Family Science Night. Martinsville Middle School is on a journey to the future. Keep up the great work!

[www.martinsville.k12.va.us](http://www.martinsville.k12.va.us)



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Space Administration

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